

IN THE CLAIMS

For the convenience of the Examiner, all pending claims of the present Application are shown below in numerical order whether or not an amendment has been made and applying the revised format guidelines of 37 CFR 1.121.

1. (Currently Amended) A method for identifying an available peripheral component interconnect (PCI) slot in a computing device, comprising:

identifying ~~at least one PCI slot~~ a plurality of PCI slots in the computing device;

identifying ~~any PCI devices~~ at least one PCI device coupled to a PCI bus, the PCI bus coupled to the PCI slot; and

identifying, ~~determining if any of the identified PCI slots are available~~ without requiring physical inspection of the PCI slots, an unoccupied PCI slot, an available unoccupied PCI slot comprising an identified PCI slot that is not coupled to an identified PCI device.

2. (Currently Amended) The method of Claim 1, wherein identifying ~~at least one PCI slot~~ a plurality of PCI slots in the computing device comprises identifying a bus number and a device number for ~~at least one PCI slot~~ the plurality of PCI slots using a PCI Interrupt Request (IRQ) routing table.

3. (Original) The method of Claim 2, further comprising locating the routing table in a read-only memory in the computing device.

4. (Currently Amended) The method of Claim 1, wherein identifying ~~any PCI devices~~ the at least one PCI device coupled to a PCI bus comprises identifying a bus number and a device number for each PCI device coupled to the PCI bus.

5. (Currently Amended) The method of Claim 1, wherein ~~determining if any of the identified PCI slots are available~~ identifying an unoccupied PCI slot comprises comparing a bus number and a device number of at least one of the identified PCI slots to a bus number and a device number of at least one of the identified PCI devices.

6. (Currently Amended) The method of Claim 1, further comprising determining how many identified PCI slots are ~~available~~ unoccupied.

7. (Currently Amended) A system for identifying an available peripheral component interconnect (PCI) slot in a computing device, comprising:

at least one computer readable medium; and

software encoded on the at least one computer readable medium and operable when executed by a processor to:

identify ~~at least one PCI slot~~ a plurality of PCI slots in the computing device;

identify ~~any PCI devices~~ at least one PCI device coupled to a PCI bus, the PCI bus coupled to the PCI slot; and

~~identify, determine if any of the identified PCI slots are available~~ without requiring physical inspection of the PCI slots, an unoccupied PCI slot, an ~~available unoccupied~~ unoccupied PCI slot comprising an identified PCI slot that is not coupled to an identified PCI device.

8. (Currently Amended) The system of Claim 7, wherein the software is operable to identify ~~at least one PCI slot~~ a plurality of PCI slots in the computing device by identifying a bus number and a device number for ~~at least one PCI slot~~ the plurality of PCI slots using a PCI Interrupt Request (IRQ) routing table.

9. (Original) The system of Claim 8, wherein the software is further operable to locate the routing table in a read-only memory in the computing device.

10. (Currently Amended) The system of Claim 7, wherein the software is operable to identify ~~any PCI devices~~ the at least one PCI device coupled to a PCI bus by identifying a bus number and a device number for each PCI device coupled to the PCI bus.

11. (Currently Amended) The system of Claim 7, wherein the software is operable to ~~determine if any of the identified PCI slots are available~~ identify an unoccupied PCI slot by comparing a bus number and a device number of at least one of the identified PCI slots to a bus number and a device number of at least one of the identified PCI devices.

12. (Currently Amended) The system of Claim 7, wherein the software is further operable to determine how many identified PCI slots are ~~available~~ unoccupied.

13. (Currently Amended) A system for identifying an available peripheral component interconnect (PCI) slot in a computing device, comprising:

a memory operable to store information identifying ~~at least one PCI slot~~ a plurality of PCI slots in the computing device; and

a processor coupled to the memory and operable to:

~~identify any PCI devices~~ at least one PCI device coupled to a PCI bus, the PCI bus coupled to the PCI slot; and

~~identify, determine if any of the identified PCI slots are available~~ without requiring physical inspection of the PCI slots, an unoccupied PCI slot, an ~~available unoccupied~~ PCI slot comprising an identified PCI slot that is not coupled to an identified PCI device.

14. (Currently Amended) The system of Claim 13, wherein the processor is operable to generate the information identifying ~~at least one PCI slot~~ a plurality of PCI slots in the computing device by identifying a bus number and a device number for ~~at least one PCI slot~~ the plurality of PCI slots using a PCI Interrupt Request (IRQ) routing table.

15. (Original) The system of Claim 14, wherein the processor is further operable to locate the routing table in a read-only memory in the computing device.

16. (Currently Amended) The system of Claim 13, wherein the processor is operable to identify ~~any PCI devices~~ the at least one PCI device coupled to a PCI bus by

identifying a bus number and a device number for each PCI device coupled to the PCI bus using a bus controller.

17. (Currently Amended) The system of Claim 13, wherein the processor is operable to ~~determine if any of the identified PCI slots are available~~ identify an unoccupied PCI slot by comparing a bus number and a device number of at least one of the identified PCI slots to a bus number and a device number of at least one of the identified PCI devices.

18. (Currently Amended) The system of Claim 13, wherein the processor is further operable to determine how many identified PCI slots are ~~available~~ unoccupied.

19. (Currently Amended) A method for identifying an available peripheral component interconnect (PCI) slot in a computing device, comprising:

locating a PCI Interrupt Request (IRQ) routing table;

identifying a bus number and a device number for ~~at least one PCI slot~~ each of a plurality of PCI slots using the routing table;

identifying a bus number and a device number for ~~any PCI devices~~ at least one PCI device coupled to a PCI bus, the PCI bus coupled to the PCI slot;

comparing the bus number and the device number ~~of at least one of the~~ for each of the identified PCI slots to the bus number and the device number of at least one of the identified PCI devices; and

determining if any of the identified PCI slots are ~~available~~ unoccupied based on the comparison, an ~~available~~ unoccupied PCI slot comprising an identified PCI slot that is not coupled to an identified PCI device.

20. (Currently Amended) A system for identifying an available peripheral component interconnect (PCI) slot in a computing device, comprising:

at least one computer readable medium; and

software encoded on the at least one computer readable medium and operable when executed by a processor to:

locate a PCI Interrupt Request (IRQ) routing table;

identify a bus number and a device number for ~~at least one PCI slot~~ each of a plurality of PCI slots using the routing table;

identify a bus number and a device number for ~~any PCI devices~~ at least one PCI device coupled to a PCI bus, the PCI bus coupled to the PCI slot;

compare the bus number and the device number ~~of at least one of the identified PCI slots~~ for each of the plurality of PCI slots to the bus number and the device number of ~~at least one of the identified PCI devices~~ the at least one PCI device; and

determine if any of the identified PCI slots are ~~available~~ unoccupied based on the comparison, an ~~available~~ unoccupied PCI slot comprising an identified PCI slot that is not coupled to an identified PCI device.

21. (Currently Amended) A system for identifying an available peripheral component interconnect (PCI) slot in a computing device, comprising:

a memory containing a PCI Interrupt Request (IRQ) routing table; and

a processor coupled to the memory and operable to:

locate the routing table in the memory;

identify a bus number and a device number ~~for at least one PCI slot~~ each of a plurality of PCI slots using the routing table;

identify a bus number and a device number for ~~any PCI devices~~ at least one PCI device coupled to a PCI bus, the PCI bus coupled to the PCI slot;

compare the bus number and the device number ~~of at least one of the~~ for each of the plurality of identified PCI slots to the bus number and the device number of ~~at least one of the identified PCI devices~~ the at least one PCI device; and

determine if any of the identified PCI slots are ~~available~~ unoccupied based on the comparison, an ~~available~~ unoccupied PCI slot comprising an identified PCI slot that is not coupled to an identified PCI device.

22. (New) The method of Claim 1, wherein identifying a plurality of PCI slots in the computing device comprises generating a list of identified PCI slots associated with the computing device.

23. (New) The method of Claim 1, wherein identifying at least one PCI device coupled to a PCI bus comprises generating a list of one or more PCI devices coupled to the PCI bus.

24. (New) The system of Claim 7, wherein the software is operable to generate a list of identified PCI slots associated with the computing device to identify a plurality of PCI slots in the computing device.

25. (New) The system of Claim 7, wherein the software is operable to generate a list of one or more PCI devices coupled to the PCI bus to identify at least one PCI device coupled to a PCI bus.

26. (New) A method for identifying an available peripheral component interconnect (PCI) slot in a computing device, comprising:

generating a list of PCI slots associated with the computing device;

generating a list of one or more PCI devices coupled to the PCI bus, the PCI bus coupled to the PCI slot; and

identifying, without requiring physical inspection of any PCI slots in the computing device, an unoccupied PCI slot by comparing the list of PCI slots associated with the computing device with the list of one or more PCI devices coupled to the PCI bus, an unoccupied PCI slot comprising an identified PCI slot that is not coupled to an identified PCI device.

27. (New) A method for identifying an available peripheral component interconnect (PCI) slot in a computing device, comprising:

generating an identification table identifying a plurality of PCI slots associated with the computing device;

generating an enumeration table enumerating one or more PCI devices coupled to the PCI bus, the PCI bus coupled to the PCI slot; and

identifying, without requiring physical inspection of any PCI slots in the computing device, an unoccupied PCI slot by comparing the identification table and the enumeration table, an unoccupied PCI slot comprising an identified PCI slot that is not coupled to any enumerated PCI device.
